

HT-02-027



November 19, 2004

To: Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Attn: Art Unit 2826 - Fazli Erdem

From: George O. Saile, Reg. No. 19,572

28 Davis Avenue

Poughkeepsie, N. Y., 12603

Subject: | Serial No.: 10/761,003 01/20/04 |

Tai Min et al.

MAGNETIC TUNNELING JUNCTION FILM
STRUCTURE WITH PROCESS DETERMINED
IN-PLANE MAGNETIC ANISOTROPY

| _ Art Group: 2826 Fazli Erdem _ |

RESPONSE TO RESTRICTION REQUIREMENT


This is in response to the Restriction or Election Requirement in the Office Action dated 11/03/04. In that Office Action, restriction was required to one of two stated

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on November 22, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

 11/22/04

Inventions under 35 U.S.C. 121. The Inventions stated are Group I - Claims 15 and 16 to a semiconductor memory device, classified in Class 257, subclass 295 and Group II - Claims 1-14 to a process, classified in Class 438, subclass 3.

Applicant provisionally elects to be examined the Invention described by the Examiner as Group II - Claims 1-14 drawn to a process classified in Class 438, subclass 3. This election is made with traverse of the requirement under 37 C.F.R.1.143 for the reasons given in the following paragraphs.

The Examiner is respectfully requested to reconsider the Requirement for Restriction given in the Office Action. The Examiner gives the reason for the distinctness of the two inventions as (1) that the process as claimed can be used to make other and materially different products or (2) that the product as claimed can be made by another and materially different process (MPEP 806.05(f)). However, upon reading the product Claims against the process Claims one can readily see that the product Claims are directed to "an MTJ memory cell having a substantially circular horizontal cross-section, wherein a ferromagnetic free layer in said cell has a magnetic anisotropy provided by magnetic coupling with an antiferromagnetic layer" and the process Claims are directed to "a method for forming an MTJ memory cell having a substantially circular horizontal cross-section, wherein a ferromagnetic free

layer in said cell has magnetic anisotropy provided by magnetic coupling with an antiferromagnetic layer", it is necessary to obtain claims in both the product and method claim language. The method Claims necessarily use the product and vice versa. The field of search must necessarily cover both the method class/subclass 438/3 and products class 257/295 in addition to other related Classes and subclasses to provide a complete and adequate search. The fields of search for the Group I and Group II inventions are clearly and necessarily co-extensive. The Examiner's suggestion that "In the instant case in Claim 5, ferroelectric layers could have a higher or lower thickness", is very speculative and really has nothing to do with the Claims as presented in this Patent Application. Further, it is respectfully suggested that these reasons are insufficient to place the additional cost of a second Patent Application upon the Applicants. Therefore, it is respectfully requested that the Examiner withdraw this restriction requirement for these reasons.

Withdrawal of the Restriction Requirement and the Allowance of the present Patent Application is requested.

Sincerely,

A handwritten signature in black ink, appearing to be 'SBA' or similar, written over a horizontal line.

Stephen B. Ackerman, Reg. #37761